| U.S. NUCLEAR REGULATORY COMMISSION  (8-2000) 10 CFR 71  CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES |                    |                  |                                  |      |             |       |  |  |  |
|---|--------------------|------------------|----------------------------------|------|-------------|-------|--|--|--|
| a. CERTIFICATE NUMBER   | b. REVISION NUMBER | c. DOCKET NUMBER | d. PACKAGE IDENTIFICATION NUMBER | PAGE | <del></del> | PAGES |  |  |  |
| 9263  | 4                  | 71-9263          | USA/9263/B(U)-96                 | 1    | OF          | 3     |  |  |  |

#### 2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
  - a. ISSUED TO (Name and Address)
     Source Production and
     Equipment Company, Inc.
     113 Teal Street
     St. Rose, LA 70087
- b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
  Source Production and Equipment Company, Inc.
  Application dated April 22, 1999,
  as supplemented.

### 4. CONDITIONS

This certificate is conditional upon fulfilling the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

5.

- (a) Packaging
  - (1) Model No.: SPEC-150
  - (2) Description

A welded titanium encased, uranium shielded, radiographic exposure device. Primary components consist of an outer titanium shell, internal supports, depleted uranium shield, and a titanium, titanium alloy or zircalloy S-tube. The contents are securely positioned in the S-tube by a source cable lock assembly and source safety plug assembly. The unit resembles a rectangular box approximately 5.4 inches wide, 5.6 inches high and 14.5 inches long. The maximum weight of the package is 53 pounds.

(3) Drawings

The packaging is constructed and assembled in accordance with Source Production and Equipment Company, Inc. Drawing Nos. 15B000, Rev. 6; 15B001-3, Rev. 2; 15B002A, Rev. 5; 15B008, Rev. 4; 15B625, Rev. 1; 19B005, Rev. 0; 19B006, Rev. 0; and 190909, Rev. 0.

| (8-2 | NRC FORM 618 U.S. NUCLEAR REGULATORY COMMISSION (8-2000) 10 CFR 71  CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES |                    |                  |                                  |              |      |    |       |  |  |
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### (b) Contents

(1) Type and form of material

Iridium-192 as sealed sources which meet the requirements of special form radioactive material.

(2) Maximum quantity of material per package

150 curies (output)

Output curies are determined in accordance with American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography".

- 6. The source shall be secured in the shielded position of the packaging by the source assembly lock, lock cap and safety plug assembly. The safety plug assembly, lock cap and source assembly used must be fabricated of materials capable of resisting a 1475 °F fire environment for one-half hour and maintaining their positioning function. The locking ball of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
- 7. The nameplates shall be fabricated of materials capable of resisting the fire test of 10 CFR Part 71 and maintaining their legibility.

Packagings may be marked with Package Identification Number USA/9263/B(U)-85 until April 30, 2006, and must be marked with Package Identification Number USA/9263/B(U)-96 after April 30, 2006.

- 8. In addition to the requirements of Subpart G of 10 CFR Part 71:
  - (a) The package shall be prepared for shipment and operated in accordance with the Operating Procedures in Section 7, of the application, as supplemented, and
  - (b) Each packaging must meet the Acceptance Tests and Maintenance Program in Section 8, of the application, as supplemented.
- 9. The packaging authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 10. Expiration date: June 30, 2010.

| NF                                | NRC FORM 618 U.S. NUCLEAR REGULATORY COMMISSION   |                    |                  |                                  |      |    |       |  |  |  |
|-----------------------------------|---|--------------------|------------------|----------------------------------|------|----|-------|--|--|--|
| (8-2<br>10 (                      | NRC FORM 618 (8-2000) 10 CFR 71  CERTIFICATE OF COMPLIANCE FOR RADIOACTIVE MATERIAL PACKAGES  1. a. CERTIFICATE NUMBER 9263  b. REVISION NUMBER c. DOCKET NUMBER d. PACKAGE IDENTIFICATION NUMBER PAGE 9263  OF 3 |                    |                  |                                  |      |    |       |  |  |  |
| FOR RADIOACTIVE MATERIAL PACKAGES |   |                    |                  |                                  |      |    |       |  |  |  |
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## **REFERENCES**

Source Production and Equipment Company, Inc., application dated April 22, 1999.

Supplements dated: May 6, 1999; March 22, June 6, and June 19, 2000; March 28, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Robert Lewis, Chief

Spent Fuel Licensing Section

Spent Fuel Project Office

Office of Nuclear Material Safety and Safeguards

Date: 26 April 2005



# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

### SAFETY EVALUATION REPORT

Docket No. 71-9263 Model No. SPEC-150 Package Certificate of Compliance No. 9263 Revision No. 4

### **SUMMARY**

By application dated March 28, 2005, Source Production and Equipment Co., Inc. (SPEC) requested renewal from the U.S. Nuclear Regulatory Commission (NRC) of Certificate of Compliance No. 9263, for the Model No. SPEC-150 package. SPEC did not request any changes to the package design or authorized contents but did request an amendment to update the certificate to meet requirements of 10 Code of Federal Regulations (CFR) Part 71 as revised in a final rule effective October 1, 2004 (69 FR 3698). The certificate title has been amended to include the "-96" designation identifying that it meets the updated regulations. The certificate has been renewed for a five year term.

### **EVALUATION**

By letter dated March 28, 2005, the applicant, SPEC, requested an amendment to Certificate of Compliance No. 9263 for its Model No. SPEC-150 package to include the "-96" in the identification number, as specified in 10 CFR 71.19(e). Model No. SPEC-150 package is currently certified by NRC as meeting Type B(U)-85 requirements. The applicant stated that the recent changes to 10 CFR Part 71 do not apply to the model and would not affect approval of the Model No. SPEC-150 as a "-96" transport package. The package is approved for transport of a maximum of 150 curies of iridium 192 as a sealed source providing primary containment and meeting the requirements of special form of radioactive material. In addition to updating the certificate with the "-96" designation, the applicant requested that the Certificate of Compliance be renewed.

To support its request for the "-96" designation, the applicant provided a table addressing revised Subparts E and F of 10 CFR Part 71 and the affects of the revisions to the transportation package. The applicant provided a table citing regulations in these subparts and the related impacts to the certificate. The analysis concluded that changes in Subparts E and F due to the revised 10 CFR Part 71 are not applicable to Model No. SPEC-150 package.

Staff evaluated the analysis provided by the applicant as well as assessing the impacts of issues identified in the final rulemaking for 10 CFR Part 71. Nineteen issues were considered in the rulemaking process that lead to the revised rule. Five of these issues where not adopted into the final rule. The remaining 14 issues were evaluated for applicability to the Model No. SPEC-150 Certificate of Compliance. Staff agreed with the applicants conclusion and determined that, other than Issue 8, Grandfathering Previously Approved Packages, the issues are not applicable to this certificate.

Issue 8 addressed the process adopted in the final rule allowing continued use, for specific periods of time of a previously approved packaging design without demonstrating compliance to the final rule. The applicant has decided in accordance with 10 CFR 71.19(e) to submit information demonstrating compliance with the final rule and thus satisfying these issues.

The applicant also requested renewal of Certificate of Compliance No. 9263. The staff reviewed the documents referenced in the certificate and determined that the documentation was available and complete. The staff also reviewed the operating and maintenance procedures for the package and found them to be adequate.

The following changes have been made to the Certificate of Compliance:

Condition No. 3(b) of the certificate was revised to correct the Application date.

Condition No. 7 of the certificate allows a package to be marked with the previous package identification number, USA/9263/B(U)-85, until April 30, 2006. This is to allow time to replace the packaging nameplate that shows the revised package identification number, USA/9263/B(U)-96.

Condition No. 9 was revised to reflect the change in the general license requirements as set forth in the new Part 71 ruling that became effective October 1, 2004.

The March 28, 2005, submittal was included in the References section.

### CONCLUSION

Based on the statements and representation in the application, the staff concludes that the Model No. SPEC-150 meets the requirements of the revised 10 CFR Part 71 and can be designated with "-96" in the identification number. In addition, the certificate has been renewed for a five year term that expires on June 30, 2010.

Issued with Certificate of Compliance No. 9263, Revision No. 4 on <u>38 Aprol</u>, 2005.